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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,725	11/25/2003	Boris Dorfman	42783-0118	5769

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RIDOUT & MAYBEE
SUITE 2400
ONE QUEEN STREET EAST
TORONTO, ON M5C3B1
CANADA

EXAMINER	
PAUL, DISLER	

ART UNIT	PAPER NUMBER
2615	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,725	DORFMAN ET AL.	
	Examiner	Art Unit	
	DISLER PAUL	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9,10,12-19,21-26,28-34,36 and 37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9,10,12-19,21-26,28-34,36 and 37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/18/05;9/27/04; 5/23/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION DETAILED ACTION

Response to Amendment

Applicant's amended claimed limitation which states "microprocessor to route signals from the microphone to the auxiliary input/output device " will be further considered in this non-final office action as set forth below.

Examiner has argued the difference between the electric acoustic signal and audio signal as discussed in the last interview " , Note However, the examiner has interpreted the electric acoustic signal as simply the " acoustic signal that are electrically transmitting through any device i.e (mobile, analyzer) and the audio device as simply any acoustic signal transmitting through air via the speaker and to be picked up by the microphone.

Also the Applicant's argument of the new feature wherein " a microprocessor to route signals from the microphone to the auxiliary input/output device and similarly, of microprocessor configure to route the signals form the auxiliary input/output device to the speaker" have been considered and rejected over new prior art.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1-2,7,12,21,23-24,26,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaMedica,Jr. ("US 7,024,161 A1") and Miller et al. (US 6,879,693 B2).

Re claim 1, LaMedica,Jr. disclosed a method of testing the audio performance , the method comprising: providing a mobile voice-enabled communication device, the device comprising a microprocessor, a microphone connected to the microprocessor, a speaker connected to the microprocessor, and an auxiliary input/output device connected to the microprocessor and memory connected to the microprocessor (fig.1 wt (114); fig.4; col.4 line 32-53); producing a microphone electric audio test signal on an audio generator external to the mobile voice enabled communication device (fig.1 wt (102-106);col.4 line 47-52); providing the microphone electric audio test signal of the audio generator as an input to an external speaker (fig.1 (112)); outputting the microphone acoustic audio test signal from the external speaker corresponding to

the microphone electric audio test signal; and receiving the microphone acoustic audio test signal from the external speaker as an input to the microphone of the mobile voice-enabled communication device (fig.1 (112,122);col.4 line 38-42/the signals generated to be received in the built-in microphone of the device); outputting a microphone electric audio output signal from the microphone of the mobile voice-enable communications device corresponding to the acoustic audio test signal.

While, LaMedica,Jr. disclose of the above with the memory connected to the microprocessor and the auxiliary input/output device and testing using a controller to operate the handset mobile device (see fig.4 wt (61,51); col.10 line 42-50). However, LaMedica, Jr. fail to disclose of the specific wherein a memory and a software module stored in the memory which configures the microprocessor to directly route signals from the microphone to the auxiliary input/output device.

However, Miller et al. disclose of a testing of a device wherein the specific having the microprocessor to route signals from the microphone to the auxiliary output device as in testing (fig.3 wt (208,318) with external jack to input to (external transmitter); col.8 line 65 & col.9 line 5) for purpose of assessing the performance of device actuators. Thus, taking the combined teaching of LaMedica, Jr. and Miller et al. as a whole, it would have been obvious for one of the ordinary skill in the art at the time of the invention to have

modify LaMedica, Jr. with the specific having the microprocessor to route signals from the microphone to the auxiliary input/output device as in testing (fig.3 wt (208,318) with external jack to input to (external transmitter); col.8 line 65 & col.9 line 5) for purpose of assessing the performance of device actuators.

The combined teaching of LaMedica, Jr. and Miller et al. as a whole, teach of the outputting the microphone electric audio output signal from the auxiliary input/output device to an external test system (fig.1 wt (115,102); col.4 line 1-30); and analyzing the microphone electric audio output signal output from the auxiliary input/output device on the external test system (col.5 line 1-8; fig.1 (106)).

Re claim 2, the method of claim 1, wherein the microphone electric audio output signal output is compared to the microphone electric audio test signal (col.5 line 10-15; fig.1 (106); col.12 line 43-46).

Re claim 21, the method of claim 1, wherein the auxiliary input/output device is an electrical connector ("*fig.1 (115/electrically to connected to PC.*").

Re claim 7, the method of claim 21, wherein the electrical connector is a serial port through which the microphone electric audio output signal is output (fig.1 (115)).

Re claim 23, LaMedica Jr. disclose a system for testing the audio performance of acoustic devices, the system comprising: an external speaker for receiving a microphone electric audio test signal as input and outputting a microphone acoustic audio signal representation thereof ("*fig.1/(112)*"); and a mobile voice-enabled communication device, the device comprising a microprocessor, a microphone connected to the microprocessor, a speaker connected to the microprocessor, and an auxiliary input/output device connected to the microprocessor (fig.4); the microphone being configured to receive the microphone acoustic audio test signal output from the external speaker as input and output a microphone electric audio output signal corresponding to the microphone acoustic audio test signal (fig.1 wt (122), fig.4;col.4 line 38-42); receiving the microphone electric audio output from the microphone (fig.1).

while, LaMedica,Jr. disclose of the above with the memory connected to the microprocessor and the auxiliary input/output device and testing using a controller to operate the handset mobile device (see fig.4 wt (61,51); col.10 line 42-50). However, LaMedica, Jr. fail to disclose of the specific wherein the microprocessor under instruction of the software module being configured to: receiving the microphone electric audio output from the microphone and directly route the microphone electric audio output signal to the auxiliary input/output device for outputting thereof for analysis.

However, Miller et al. disclose of a testing of a device wherein the microprocessor under instruction of the software module being configured to: receiving the microphone electric audio output from the microphone and directly route the microphone electric audio output signal to the auxiliary input/output device for outputting thereof for analysis (fig.3 wt (208,318) with external jack to input to (external transmitter); col.8 line 65 & col.9 line 5) for purpose of assessing the performance of hearing aid actuators. Thus, taking the combined teaching of LaMedica, Jr. and Miller et al. as a whole, it would have been obvious for one of the ordinary skill in the art at the time of the invention to have modify LaMedica, JR. with the specific the microprocessor under instruction of the software module being configured to: receiving the microphone electric audio output from the microphone and directly route the microphone electric audio output signal to the auxiliary input/output device for outputting thereof for

analysis for purpose of assessing the performance of hearing aid actuators.

Re claims 24,26 have been analyzed and rejected with respect to claim 21,7.

Re claim 12, the method of claim 1, wherein the mobile voice-enable communications device comprises an Rf transceiver connected to the microprocessor and wherein the mobile voice-enabled communication device is is enabled for two-way wireless data communications (*"fig.1-4/mobile Rf transceiver"*).

*Re claim 28, has b*een analyzed and rejected with respect to claim 12.

2. Claims 13,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaMedica,Jr. ("US 7,024,161) and Miller et al. (US 6,879,693 B2) and further in view of Feng et al. (7,206,423 B1).

Re claim 13, the method of claim 1, further comprising:: producing a speaker electric audio test signal on the audio generator external to the mobile voice-enabled communication device (fig.1

(102)); receiving the speaker electric audio test signal an input to the auxiliary input/output device from the audio generator (fig.1 (115));

However, the combined teaching of LaMedica, JR. and Miller et al. as a whole, fail to disclose o the limitation wherein a microprocessor configure to route signals form the auxiliary input/output device to the speaker. But, Feng et al. disclosed of a system wherein the similar concept of having a microprocessor configure to route signals form the auxiliary input/output device to the speaker (fig.2 (30c); col.3 line 34-40; col.4 line 20-52) for purpose of enabling the system to perform diagnostic and maintenance on the device. Thus, taking the combined teaching of LaMedica, JR. and Miller et al. and Feng et al. as a whole, it would have been obvious for one of the ordinary skill in the art to have modify the combined teaching of LaMedica, JR. and Miller et al. as a whole, with the concept of having a microprocessor configure to route signals form the auxiliary input/output device to the speaker for purpose of enabling the system to perform diagnostic and maintenance on the device.

The combined teaching of LaMedica, JR. and Miller et al. and Feng et al. as a whole, further teach of the outputting from the speaker an acoustic audio signal corresponding to the speaker test electric audio signal (fig.1,4); providing the speaker acoustic audio signal outputted from the device speaker as an input to an external

microphone and outputting a speaker electric audio output signal corresponding to the speaker acoustic audio output signal from external microphone to the external test system (fig.1 (108); col.4 line 35-40); and analyzing the electric audio signal outputted from the external microphone on the external test system (fig.1 (102,106)).

Re claim 30, has been analyzed and rejected with respect to claim 13.

3. Claim 14-15,19,37, 22,32-34,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaMedica,Jr. ("US 7,024,161) and Feng et al. (US 7,206,423 B1).

Re claim 14, LaMedica,Jr. disclosed a method of testing the audio performance , the method comprising: providing a mobile voice-enabled communication device, the device comprising a microprocessor, a microphone connected to the microprocessor, a speaker connected to the microprocessor, and an auxiliary input/output device connected to the microprocessor (fig.1 wt (114); fig.4; col.4 line 32-53); producing a speaker electric audio test signal on an audio generator external to the mobile voice enabled communication device (fig.1 wt (102-106);col.4 line 47-52); providing the speaker electric audio test

signal of the audio generator as an input to the auxiliary input/output device from the audio generator (fig.1 (115));

While, LaMedica, Jr. disclose of the microprocessor and speaker both interconnected and the processor (fig.4); However, LaMedica, Jr. fail to disclose of the specific wherein a software module stored in the memory which configured the microprocessor to route signals form the auxiliary input/output device to the speaker. But, Feng et al. disclosed of a system wherein the similar concept of having a microprocessor configure to route signals form the auxiliary input/output device to the speaker (fig.2 (30c); col.3 line 34-40; col.4 line 20-52) for purpose of enabling the system to perform diagnostic and maintenance on the device. Thus, taking the combined teaching of LaMedica, JR. and Feng et al. as a whole, it would have been obvious for one of the ordinary skill in the art to have modify LaMedica, JR. with the concept of having a microprocessor configure to route signals form the auxiliary input/output device to the speaker for purpose of enabling the system to perform diagnostic and maintenance on the device.

The combined teaching of LaMedica, JR. and Feng et al. as a whole, teach of the outputting from the speaker an acoustic audio output signal corresponding to the speaker test electric audio signal

and providing the speaker acoustic audio output signal from the speaker as an input to an external microphone (fig.1,4 wt (108)) ;outputting an electric audio output signal corresponding to the speaker acoustic audio output signal from the external microphone to an external test system and analyzing the speaker electric audio output signal output from the external microphone on the external system(fig.1 (108,102,106)).

Re claim 15, the method of claim 14, wherein the speaker electric audio output signal is compared to the speaker electric audio test signal (col.5 line 10-15; fig.1 (106); col.12 line 43-46).

Re claim 22, the method of claim 14, wherein the auxiliary input/output device is an electrical connector (" *fig.1(115) to connect to PC*").

Re claim 19, the method of claim 21, wherein the electrical connector is a serial port through which the microphone electric audio output signal is output (fig.1 (115)).

Re claim 29, the system of claim 23, further comprising: an audio generator coupled to the external speaker for producing the microphone

electric audio test signal and providing the microphone electric audio signal test to the external speaker; and an audio analyzer coupled to the auxiliary output device for receiving and analyzing the microphone electric audio signal ("*fig.1;col.4 line 55 up col.5 line 15*").

Re claim 31 has been analyzed and rejected with respect to claim 14.

Re claim 37, the system of claim 31, further comprising: an audio generator coupled to the auxiliary input/output device for producing the speaker test electric audio signal and providing the speaker test electric audio test signal to the auxiliary input/output device; and wherein the external test system is an audio analyzer coupled to the external microphone for receiving and analyzing the speaker electric audio output signal ("*fig.1 (102-106)*").

Re claims 32-34,36 have been analyzed and rejected with respect to claims 24-26,28 respectively.

1.

Claims 3-4,15-17,9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaMedica,Jr. ("US 7,024,161 A1") and Miller et al. (US 6,879,693 B2) and further in view of Harrel et al. ("US 2003/0073408 A1").

Re claim 3, the method of claim 1, However, LaMedica Jr. and Miller et al. as a whole, fail to disclose of the further details wherein at least one signal characteristic of the further electric audio signal is compared to a predefined test limit. However, Harrel et al. disclose an audio system in which he disclose of the further details wherein at least one signal characteristic of the further electric audio signal is compared to a predefined test limit ("*page 2[0014] line 1-2-signal's amplitude as characteristic for predefined limit in analysis and also page 5[0058] line 1-2*") for the purpose of detecting whether the device speakers are functioning. Thus, taking the combined teaching of LaMedica Jr. and Miller et al. and now Harrel et al. as a whole, it would have been obvious for one of the ordinary skill in the art to modify LaMedica Jr. and Miller et al. as a whole, by incorporating the further details wherein at least one signal characteristic of the further electric audio signal is compared to a predefined test limit for the purpose of detecting whether the device speakers are functioning.

Re claim 4, the method of claim 1, However, combined teaching of LaMedica Jr. and Miller et al. as a whole, fail to disclose of the details of wherein in a plurality of characteristics of the further electric audio signal are compared to predefined test limits for a

plurality of audio signal characteristics selected from the group including signal amplitude, frequency response, and harmonic distortion. But, Harrel disclose of an audio system in which he disclose of the further limitation of wherein in a plurality of characteristics ("*page 1[0012] line 17-18*") of the further electric audio signal are compared to predefined test limits("*page 5[0058]line 1-2 and further fig.12/S1640; page 3[0030] line 11-13 predetermined parameters/specifications*") for a plurality of audio signal characteristics selected from the group including signal amplitude ("*page 2[0014] line 1-2-signal's amplitude as characteristic")*, frequency response("*page 1[0005] line 6; page 1[0006] line 7-10-frequency response test*") and harmonic distortion ("*fig.2; page 3[0038] line 4-6*") for the purpose of detecting whether the device speakers are functioning. Thus, taking the combined teaching of combined teaching of LaMedica Jr. and Miller et al. and Harrel as a whole, it would have been obvious for one of the ordinary skill in the art to modify combined teaching of LaMedica Jr. and Miller et al. as a whole, by incorporating he details of wherein in a plurality of characteristics of the further electric audio signal are compared to predefined test limits for a plurality of audio signal characteristics selected from the group including signal amplitude, frequency response, and harmonic distortion for the purpose of detecting whether the device speakers are functioning.

Re claims 15-17 in regard to speaker audio signal, have been analyzed and rejected with respect to claim 2-4 respectively.

Re claim 9, the method of claim 1, However, combined teaching of LaMedica Jr. and Miller et al. as a whole, fail to disclose of the further limitation of wherein the electrical audio signal produce represent single tone signal. However, Harrel disclose of a system in which he disclose of the further limitation of wherein the electrical audio signal produce represent single tone signal ("*fig.1/28; page 2[0027] line 1-3-radio signal produce single tone signals")* for the purpose of detecting whether the device speakers are functioning. Thus, taking the combined teaching of combined teaching of LaMedica Jr. and Miller et al. and Harrel as a whole, it would have been obvious for one of the ordinary skill in the art to modify combined teaching of LaMedica Jr. and Miller et al. as a whole, by incorporating the further details of wherein the electrical audio signal produce represent single tone signal for the purpose of detecting whether the device speakers are functioning.

Re claim 10, the method of claim 1, however, combined teaching of LaMedica Jr. and Miller et al. as a whole, fail to disclose of the limitation of wherein the electric audio signal produced represents a multitone signal. However, Harrel disclose a system in which he

disclose of the further limitation of wherein the electric audio signal produced represents a multitone signal ("*fig.1/28; page 2[0027] line 1-3-radio signal produce multinone signals")* ,thus taking the combined teaching of combined teaching of LaMedica Jr. and Miller et al. and Harrel as a whole, it would have been obvious for one of the ordinary skill in the art to modify combined teaching of LaMedica Jr. and Miller et al. as a whole, by incorporating the further limitation of wherein the electric audio signal produced represents a multitone signal for the purpose of detecting whether the device speakers are functioning.

6. Claims 5-6,25 are rejected under 35 U.S.C. 103(a) as being unpatentable LaMedica,Jr. ("US 7,024,161 A1") and Miller et al. (US 6,879,693 B2) and further in view of official notice.

Re claim 5, the method of claim 1, with the acoustic audio signal being provided to the external speaker to the microphone of the mobile voice enable device communications device (fig.1,4), However, combined teaching of LaMedica Jr. and Miller et al. a whole, fail to disclose connecting the external speaker to the device microphone with a seal prior to the acoustic audio signal signal being provided to the

external speakers. But, official notice is taken the concept of providing a seal for connecting the speaker with a microphone during testing is commonly known in the art, thus it would have been obvious at the time of the invention for incorporating the concept of providing a seal for connecting the speaker with a microphone during testing for the purpose of obtaining a more accurate acoustic level signal to be analyzed.

Re claim 6, the method of claim 21, wherein the electrical connector is a plug through which the audio output signal is output (fig.1 (115)), However, combined teaching of LaMedica Jr. and Miller et al. a whole, fail to disclose of the connector being a headset plug, However, official connector for outputting notice is taken the limitation of having the headset plug is commonly known in the art, thus it would have been obvious for one of the ordinary skill in the art to have incorporated the connector being a headset plug for playing back audio signals.

Re claim 25 have been analyzed and rejected with respect to claim 6 respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 572-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./
Examiner, Art Unit 2615

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2615